

## ABSTRACT OF THE DISCLOSURE

A crystalline silicon layer is epitaxially grown on a substrate having a porous silicon layer on the surface. In making epitaxial growth by liquid-phase epitaxy, a silicon material is previously dissolved in a melt at a high temperature and then the silicon substrate to be subjected to epitaxy is immersed in the melt. Then, its temperature is gradually lowered, whereby the silicon precipitated from the melt is epitaxially grown on the silicon substrate. In this epitaxy, a substrate having the principal plane of (111)-plane is used as the silicon substrate.

This provides a process by which a crystalline silicon layer covering a porous silicon layer completely is epitaxially grown on the porous silicon layer without causing any abnormal growth.